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EXAMINER

CULBRETH, ERIC D

ART UNIT

PAPER NUMBER

3616

DATE MAILED: 12/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/064,734

Applicant(s)

BARRY, JACKSON E.

Examiner

Eric D Culbreth

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2. 6) ☐ Other: .

DETAILED ACTION

Oath/Declaration

1. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:
The date of signature has been obliterated by photocopy.

Information Disclosure Statement

2. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

This refers to the reference(s) cited on page 1.

Drawings

3. The drawings are objected to because of the following informalities. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
 - a. Reference numeral 30 is not on the drawings (page 4, paragraph [0020]).

- b. Reference numeral 41b refers to a taper in paragraph [0026] and a hole in paragraph [0028]; a reference numeral should only refer to one part of the invention.
- c. In Figure 1 the lead lines for steering knuckles 12 are wrong (see paragraph [0018] on page 3).
- d. Similarly, the lead line for reference numeral 41a is wrong in Figure 4 (see page 5, paragraph [0026]).
- e. Contrary to page 5, paragraph [0023], line H is not aligned with line A (one line is vertical, the other horizontal).

Specification

- 4. The disclosure is objected to because of the following informalities:
 - a. The last line of page 4 is not clear (“...improve package...?”).
 - b. On page 6, paragraph [0029] has an incomplete sentence (“entire” what in line 5 of the paragraph).
 - c. On page 2, line 9 of paragraph [0009] “minimize” should be “minimizes”.
 - d. On page 2, paragraph [0010], line 1 of the paragraph “a” should precede “ball joint”.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

- 5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. In claim 2, line 1 “the steering” is unclear (there is no antecedent basis for “the steering”; “the steering” what).

b. In claim 5, there is no antecedent basis for the first ball joint and the second ball joint.

c. Line 1 of claim 9 recites the invention as a ball joint unit for use with a steering linkage, but the body of the claim recites elements of the steering linkage as the invention (i.e., first and second steering links). (It is not clear if the invention of claim 9 is just the ball joint or the entire linkage).

d. In claim 10, there is no antecedent basis for “the first ball joint” and “the second ball joint”.

e. In claims 1 and 9, it is inaccurate to recite the ball portions as above and below the steering knuckles (in Figures 1-2, the ball portions are above and below the arm of the steering knuckle, but not above and below the steering knuckle).

f. In claim 4, line 1 “one the first and steering link” is unclear.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claim 9 as best understood is rejected under 35 U.S.C. 102(b) as being anticipated by Lucas.

Lucas discloses a ball joint unit as best understood for a steering linkage comprising a first steering link 14 having a socket 20 at an end, a second steering link 36 having a socket 40 at an end as broadly recited, and a steering knuckle with a through hole at arm 16. Stud 26 has balls 22, 34 at either end above and below the arm 16 of the steering knuckle, which is the extent to which applicant's ball portions are above and below the steering knuckle.

9. Claims 1-6, 9-11, and 14 as best understood are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Thompson et al.

10. Claims 1-6, 9-11 and 14 as best understood are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Diener et al.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 1-3 as best understood are rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue et al (cited by applicant) in view of Lucas.

Inoue et al disclose steering arm 1a and tie rod 11 connected at a joint within the inner wheel volume (noting Figure 2). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Inoue et al to include the dual ball joint assembly of Lucas connecting the steering arm and tie rod in order to prevent the ball from becoming loosened (Lucas, column 1, lines 4-7) (claim 1). Regarding claim 2, in view of the indefinite recitation, the steering extends forward from the wheel axis of rotation (i.e., part of the front steering wheel is forward of the wheel axis). Inoue et al's steering knuckle 1 is attached to a drive axle, shown above lower arm 4 in Figure 1)(claim 3).

Allowable Subject Matter

13. Claims 7-8 and 12-13 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric D Culbreth whose telephone number is 703/308-0360. The examiner can normally be reached on Monday-Thursday, 9:30-7:00 alternate Fridays off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on 703-308-2089. The fax phone number for the organization where this application or proceeding is assigned is 703/746-3508.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.

Eric D Culbreth
Primary Examiner
Art Unit 3616



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